



Open Avionics System Integration Study (OASIS) *Mid-Term Status Summary*

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Boeing Phantom Works

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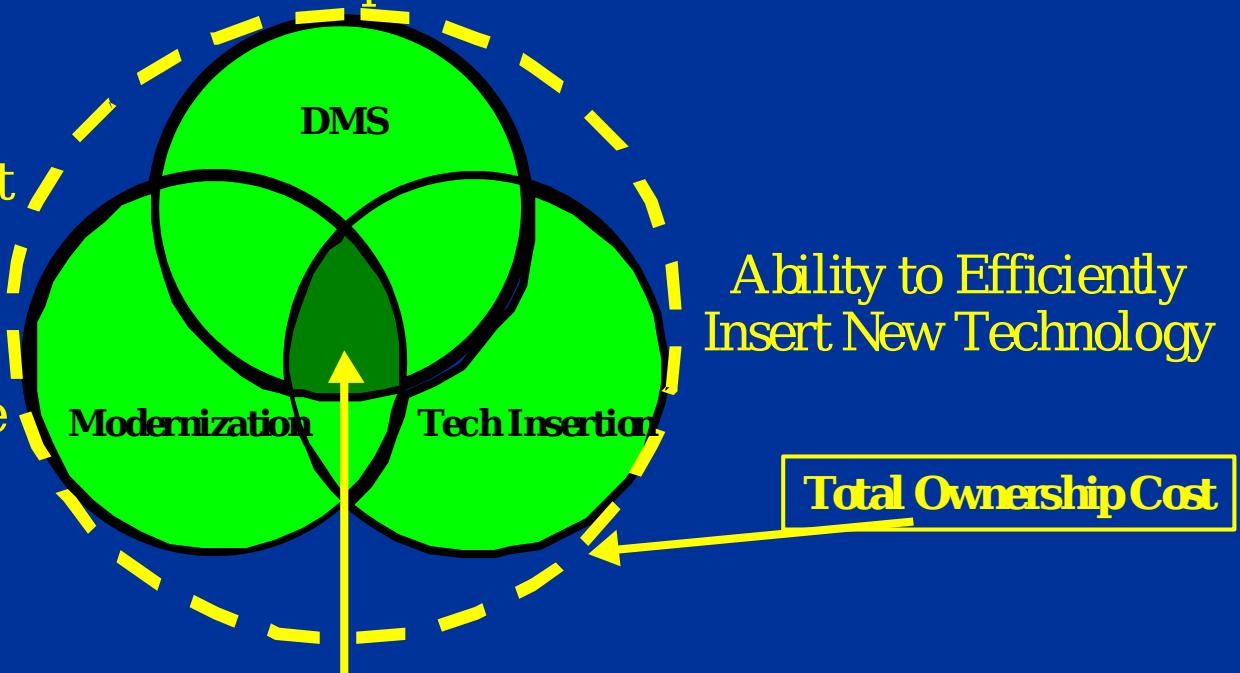
Scope of the Problem

Birthplace, Home and Future of Aerospace

Ability to Efficiently Respond to Loss of Supplier Base or Discontinuance of Specific Product Line

Ability to Efficiently React to New Requirements/Capability Needs Resulting From Evolving Threat and Force Structure

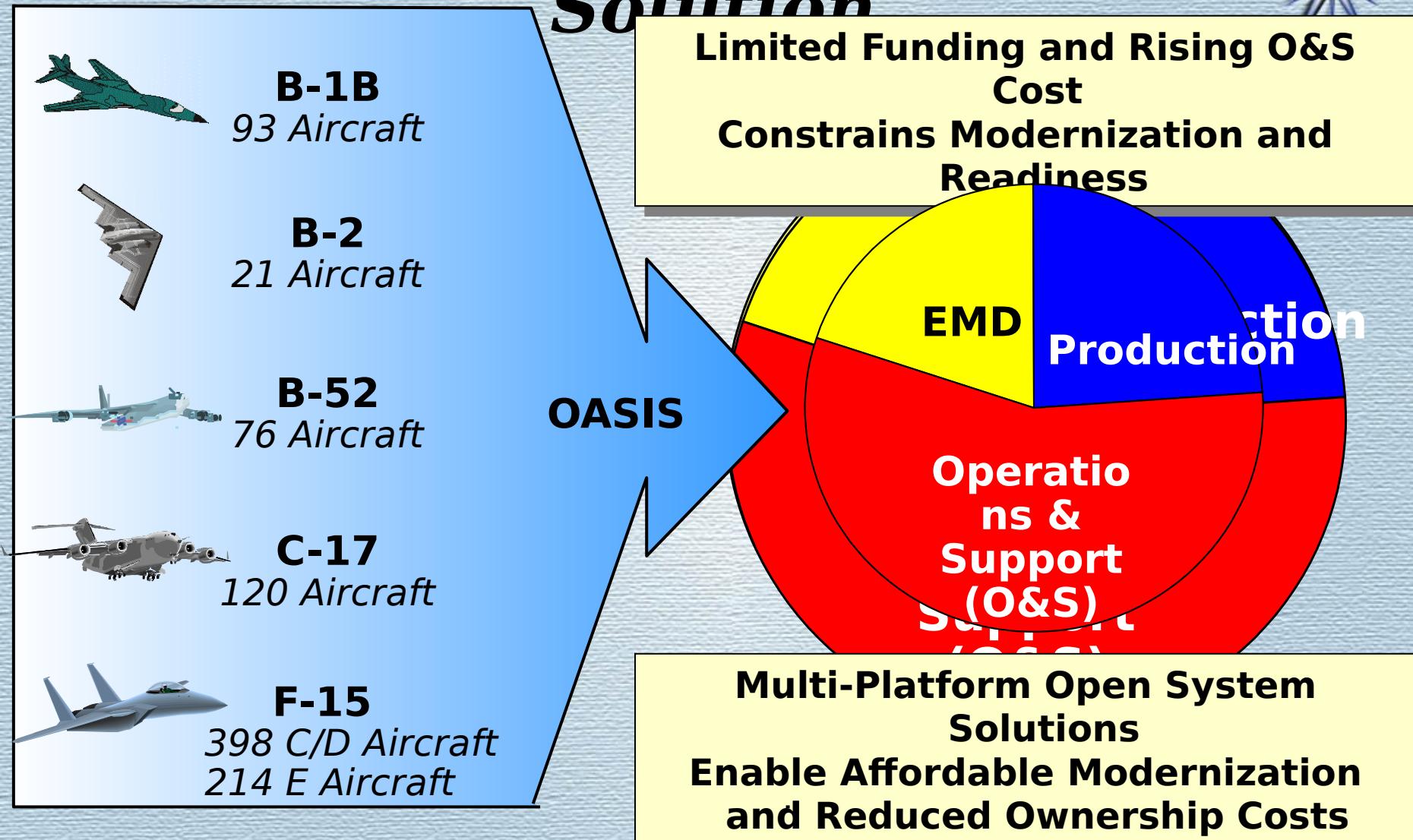
Ability to Efficiently Insert New Technology



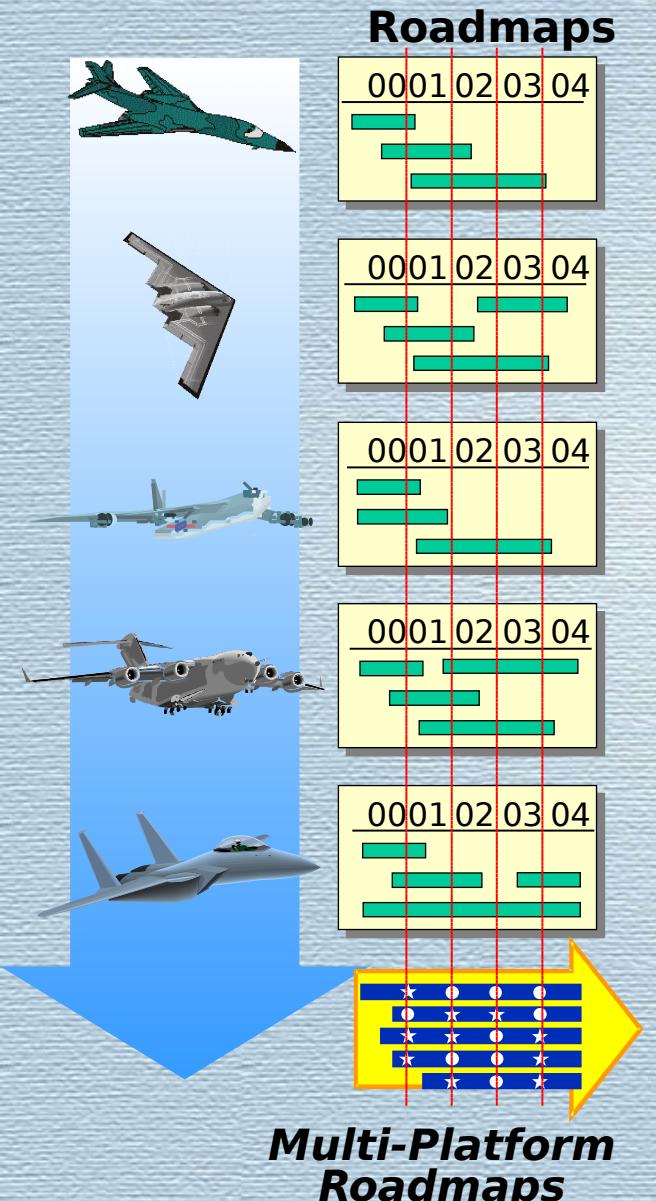
Goal is to Leverage Affordable Solutions Which Respond to All Three Concerns Across Multiple Platforms

OASIS

A Multi-Platform Open System Solution

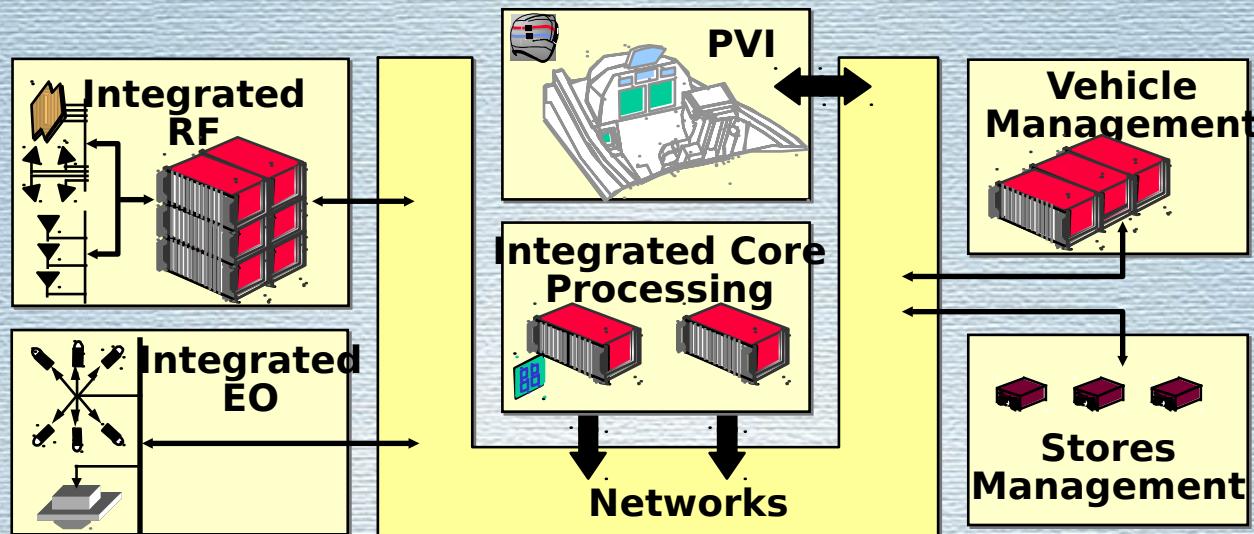


OASIS Approach



- Survey Platform Roadmaps & Funding
- Identify Opportunities for Open Systems
- Identify Cross Platform Multi-Platform Open System Opportunities
 - Core Processing Infrastructure
 - Displays & Video Processing Architecture
 - Electronic Warfare (EW)
 - Radar Warning Receiver & Jammers
 - Communication/Navigation/Identification (CNI)
 - Global Air Traffic Management (GATM)
 - Beyond Line Of Sight (BLOS) Comm
 - Electro-Optic Sensor
 - Advanced Targeting FLIR (ATFLIR)

OASIS Migration to Open Systems



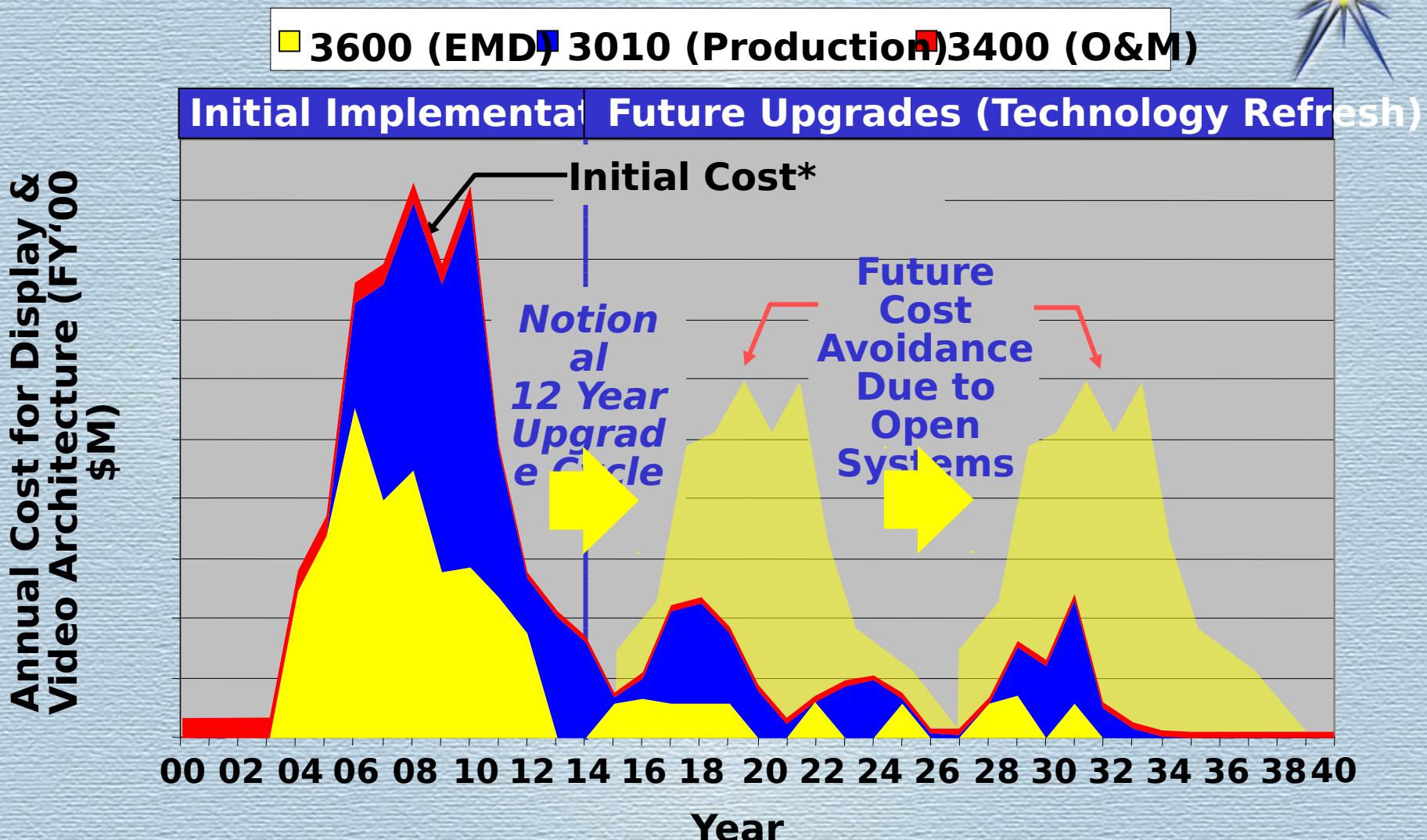
- Core Infrastructure: Processors, Networks and Displays
- Sensors & Electronic Warfare
- Communications Navigation and Identification

Incremental Approach for Affordable Open Systems Avionics



OASIS Display & Video

- A Technical Imperative -



* Includes EMD and Production Costs, Excludes F-15 MSIBOEING®

OASIS Phase I *Lessons Learned*



Platform Roadmaps & Planned Funding

- POM Funding Does Not Address Long Term Program Needs
- Need Stable Long Term Modernization & Funding Plan (20 Yrs)

Open System Architecture Migration Plans

- Platforms are Beginning to Migrate to Open Systems
- Need Consistency in Long Term Open Systems Migration Plans
- Need Integrated Strategy for Affordability (Modernization & O&S)

Avionics Cost Data

- Difficult to Obtain Defensible Cost Data for TOC Analysis
- Block Upgrades Make Funding Analysis Difficult
- Difficult to Quantify Defensible Current & Future DMS/OP Costs
- Need USAF Support to Address O&S Manning (Public)

Open Avionics Systems Integrated Solutions (OASIS)

B-1B
93 Aircraft



Integrated Change

00	01	02	03
04			

00	01	02	03
04			

00	01	02	03
04			

00	01	02	03
04			

00	01	02	03
04			

00	01	02	03
04			

B-2
21 Aircraft



B-52
76 Aircraft



C-17
120 Aircraft



F-15
218 E Model
398 C/D Model



Multi-Platform
Roadmaps

- **OASIS has Identified Multi-Platform Open Systems Savings**
- **OASIS can be a Model for Multi-Platform Open System Solutions to Reduce TOC**

